Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 15 of the Commission's	)	**ET Docket No. 98-156**
Rules to allow certification of equipment in the	)	**RM-9189**
24.05-24.25 GHz band at field strengths up to	)	
2500 mV/m	)	

To: The Commission

CONSOLIDATED REPLY TO OPPOSITIONS TO PETITIONS FOR RECONSIDERATION

ARRL, the National Association for Amateur Radio, also known as The American Radio Relay League, Incorporated (ARRL), by counsel, hereby respectfully submits its reply to Oppositions to ARRL's February 2, 2002 Petition for Reconsideration in this proceeding. Oppositions were filed on or about the extended opposition date[1] of May 31, 2002 by the following entities: Information Technology Industry Council (ITI); Harris, Wiltshire and Grannis, LLP on behalf of various entities [2] (HWG); Fletcher, Heald & Hildreth, PLC on behalf of various entities [3] (FHH) and The IEEE Local and Metropolitan Area Networks Standards Committee (IEEE 802). In response to the arguments contained in these oppositions, ARRL replies as follows:

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[1] The time in which oppositions to the Petition for Reconsideration could be filed was extended by the *Order Granting Extension of Time*, DA 02-1162, released May 15, 2002. The due date was extended to May 31, 2002. The time for filing replies was extended to June 28, 2002. Therefore, this reply is timely filed.

[2] These included Agere Systems, Inc.; Apple Computer, Inc.; Bluetooth Special Interest Group; Cisco Systems, Inc.; Microsoft, Inc.; and Voicestream Wireless Corporation.

[3] These included Intersil Corporation; Symbol Technologies, Inc; Wireless Ethernet Compatibility Alliance; and XtremeSpectrum, Inc.

I. Introduction

1. The oppositions filed in this proceeding opposing the ARRL Petition for Reconsideration each suffer the same flaw: they respond to arguments not made by ARRL. The alarmist call to arms by the opposing parties suggest that ARRL's intention is to require licensing of every cordless telephone and baby monitor in the United States, and to establish a crushing burden for the United States' marketplace of electronic consumer goods. Nothing could be further from the truth. In point of fact, ARRL has no interest in pushing for licensing of Part 15 devices generally, or to inhibit the ability of manufacturers to provide unlicensed devices that are in demand by the American public, under certain conditions. Indeed, ARRL appreciates that as a general matter, the compatibility between and among Part 18 devices, Part 15 devices, and Amateur Radio stations accounts for the stability of the Amateur allocations in some bands. It also constitutes an efficient means of deploying and reusing scarce spectrum, especially above 900 MHz.

2. It is not, therefore, ARRL's position that the Commission must license all electronic devices which "might possibly" cause interference, as IEEE 802 misleadingly argues, or that ARRL intends to "pull the rug out from under" Part 15. Nor, to answer the FHH parties' query, does ARRL ask the Commission to license computer mice and keyboards, wireless headphones, or other low power devices which do not have significant interference potential to licensed radio services.

3. What, then, is ARRL's argument? Very simply stated, there must, by any logical interpretation of Section 301 of the Communications Act, be a point at which the

FCC must license RF devices. At and beyond that point, in order to prevent interference to licensed radio services operating in allocated bands by either international agreement or domestic rulemaking, the Commission cannot allow the devices to operate on an unlicensed basis. If, individually or in the aggregate, the unlicensed devices have a substantial interference potential to licensed radio services, they must be controlled by the licensing process in order that interference might be avoided. Below that point, the interference potential of the devices is determined by the Commission to be sufficiently small so that the devices, operated on a point-source basis or in the aggregate, can be presumed not to have a significant interference potential to licensed radio services. In those cases, the few random instances of interference can be addressed on a case-by-case basis, using the no-interference requirements in the current Part 15 regulations.

4. Where, however, is that point? Where is the line to be drawn? In ARRL's view, it is not a fixed, bright-line determination premised on an ERP or EIRP level, or a fixed field strength. The line is dependent in every case on those factors, plus, for example, duty cycle, bandwidth, antenna gain or loss, emission type, deployment area, frequency and the number of devices to be deployed. The Commission is the proper authority to draw the line in each instance, just as it does now. ARRL takes no issue with the bulk of the Part 15 decisions made by the Commission over the years, or, generally, with the last rewrite of the Part 15 regulations in 1989.[4] The problems noted by ARRL in this proceeding in particular, however, and as a general matter, are (1) that the Commission has failed to acknowledge that there is a limit to its jurisdiction to authorize

[4] See, *Revision of Part 15 of the Rules Regarding the Operation of Radio Frequency Devices Without an Individual License*, 66 RR 2d 295 (1989).

unlicensed devices, and (2) it has pushed the limit on that jurisdiction, in certain cases such as the instant proceeding, beyond the breaking point.

5. Why is the Commission obligated to license certain devices rather than allow them to operate unlicensed, and rely for interference avoidance purposes on Section 15.5 of the Commission's Rules, which requires cessation of operation of the unlicensed device where necessary to avoid harmful interference to licensed radio services? There are two reasons, one legal and one practical. The legal reason is that Section 301 of the Communications Act requires licensing precisely to avoid interference *ab initio*, rather than on a case-by-case basis. Section 302(a) of the Act gives FCC jurisdiction to establish reasonable regulations governing interference potential of devices, but that jurisdiction does not detract from or modify the absolute obligation of Section 301 to license devices for the transmission of energy or communications or signals by radio. Furthermore, Section 302(a) was enacted for the specific purpose of allowing FCC to regulate interference potential of the devices at the manufacturer level, rather than when the devices are out in the field. It is clear from the legislative history of that statutory provision that Congress expected FCC to exercise that jurisdiction to limit interference potential, not to address the enforcement of interference from RF devices in the field, which long ago was determined to be unworkable. The impracticality of aftermarket enforcement of the non-interference provision is the other reason why the Commission must license certain Part 15 devices. Once a manufacturer of an unlicensed RF device begins to market the devices, they are out of the control of the manufacturer; they are untraceable by the Commission; and they are operated by unlicensed, and presumably non-technical persons who have no appreciation for their obligation to cease operation of

the device in the event of interference to a licensed radio service. Perhaps the best example of this is the wireless LAN networks springing up at 2.4 GHz. Those operators have, as a general matter, no ability to determine whether interference is caused by the operation of the LAN devices, and no understanding of their regulatory obligations. The Section 15.5 rules are virtually meaningless from their perspective. The Commission certainly does not have the enforcement resources to address these matters in the field.

6. Finally, ARRL is not suggesting that the Commission could not obtain statutory authority to exempt certain devices from Section 301 licensing requirements. It is merely arguing that it has no such authority now, and cannot therefore permit certain devices, such as the devices authorized in this proceeding, to operate without individual licenses.

II. The Opposition of FHH

7. The FHH parties state that they believe ARRL's argument to be wrong, but not irrational. FHH correctly assumes that ARRL accepts the lawfulness of certain unlicensed intentional radiators and most unintentional radiators. FHH also correctly assumes that ARRL is not suggesting the removal from the market of "computers, cordless phones, and all other radio-based consumer devices." However, FHH argues that Section 302(a) is a sufficient statutory underpinning for the Part 15 rules. For that premise, it argues that the Commission's construction of that section, which the Commission relies on as its authority for unlicensed operation generally, is entitled to great deference. FHH pleads that argument effectively. Unfortunately, it is not a rebuttal to the argument ARRL made. ARRL has no quarrel with the fact that the Commission has wide latitude to make technical rules governing matters delegated to the Commission by statute. The question is, however, whether Section 302(a) of the Act alleviates the Commission's obligation to

license devices, except where the Communications Act excuses a license requirement. While the Commission obviously has wide latitude to craft "reasonable regulations" regarding the interference potential of devices [and ARRL has no doubt, to answer FHH's question, that it is the Commission that decides whether the Part 15 regulations, or other regulations that regulate RF devices, are "reasonable" pursuant to Section 302(a)] that is not the issue. The issue is whether those reasonable regulations supersede or obviate the licensing requirement for some classes of RF devices. No presumption of validity that attaches to Section 302(a) decisions would affect the absolute Section 301 requirement that devices operated or used "for the transmission of energy or communications or signals by radio" from one place or another must have a license, absent some indication from Congress that Section 302(a) was intended to constitute an exemption from the license requirements of Section 301. There is no such indication anywhere that ARRL has been able to find, after diligent investigation, and FHH has cited none.

8. In fact, the presence of specific exemptions in Section 307(e) from the Section 301 licensing requirements strongly indicates that the Congress has not exempted low power RF devices from the licensing requirement, regardless of interference potential. FHH claims that the provisions de-licensing[5] the Citizen's Radio Service, the Radio Control Service, and certain aviation and maritime stations, were done after those services had already been licensed individually, and not before the devices were in the

[5] This is an inapplicable term, used by FHH; the Commission did not de-license these devices, but permitted "licensing by rule" and eliminated individual license issuance for those specific classes of devices only. That was, as FHH claims, a practical consideration. However, it is to be noted that Section 301 of the Act was unmodified by it, and the license requirement was preserved intact, without exceptions. There is no indication why Part 15 devices could not be "licensed by rule", except that Congress simply has not so provided.

field. FHH feels that therefore those instances are not similar to the license status of Part 15 devices. ARRL contends that they are exactly in the same category as Part 15 devices. Section 307(e)(1) provides that, "(n)otwithstanding any license requirement established in this chapter, if the Commission determines that such authorization serves the public interest, convenience and necessity, the Commission may by rule authorize the operation of radio stations without individual licenses in the following radio services…" Had the Congress desired to furnish the Commission with the jurisdiction to permit the operation of RF devices without individual licenses as a general matter, Section 307(e) would be the precise place to do that. Congress, however, did not do so, and we are left with the broad and absolute requirements of Section 301.[6] The Commission can, therefore, make reasonable regulations regarding Part 15 devices pursuant to Section 302(a), and for the most part it has done so. However, nothing in Section 302(a) constitutes an exemption from the requirements of Section 301.

9. FHH argues that the Commission can "fill in the gaps" in its enabling statutes. That, however, presumes the silence of the statute at issue, not a situation where, as here, the statute carries an affirmative, specific obligation. True, the subject matter is technical, complex and dynamic, and the Commission can interpret certain portions of the Communications Act in a flexible manner so as to "fill gaps where statutes are silent".

[6] The FHH parties attribute Congress' silence to its implicit satisfaction with the Commission's handling of Part 15 regulations. ARRL has another view. In the past, the Commission authorized only very low power devices to operate unlicensed. Over time, those emissions have increased steadily. The Commission now permits certain non-spread spectrum devices to operate at up to one watt output, and under certain circumstances to use unlimited antenna gain. In this proceeding, it permits devices with extremely high gain antennas to transmit at up to 2.5 V/m, measured at 3 meters. The Commission has only recently extended the concept of Part 15 unlicensed operation to the point that it is substituting these devices for licensed radio services, such as Part 101. Arguably, in the past, there was no need for Congress to turn its attention to Part 15 unlicensed operation, because the operation of such devices was "under the radar" from an interference perspective. That is not the case any longer.

National Cable & Telecommunications Association, Inc. v. Gulf Power Co., 122 S.Ct. 782, 806 (2002). Here, the statute has no gaps, which is ARRL's precise point.

10. However, this is not, once again, to claim that all Part 15 devices require licensing. Part 15 devices which, by the Commission's determination, do not possess, individually or in the aggregate, a substantial interference potential to licensed radio services in the same or adjacent bands, can be authorized without licenses because the purpose of Section 301 is to prevent interference between stations. To argue that the Commission need not license *any* RF devices, however, would be to ignore the requirements of Section 301. Could the Commission, for example, permit 24 GHz devices to operate at more than 2500 mV/m? How about 5, 10 or 25 watts? Would FHH argue that there is no limit to the Commission's discretion in terms of interference potential to licensed radio services relative to whether or not the device requires a license? Since licensing is, in part, a means of regulating the exposure of the user or the public to RF energy, can the Commission ignore the likelihood that unlicensed consumer devices with certain power levels will be operated in an unsafe manner? Certainly not. The Commission must, as ARRL argues, draw the line somewhere between licensed and unlicensed operation. It does not have unfettered jurisdiction to permit the operation of RF devices "for the transmission of energy or communications or signals by radio" on an unlicensed basis.

11. Viewed another way, what is the purpose of the Commission in licensing private, operational fixed microwave facilities under Part 101 of its rules, if at the same time it can permit 24 GHz transmissions at up to 2.5 V/m on a point-to-point basis? ARRL argues that, because garage door openers and cordless telephones (for example)

operate at sufficiently low power levels, duty cycle and antenna gain as to be presumed that they will not, individually or in the aggregate, constitute substantial interference sources, they fall under the Commission's "licensing radar". Devices which, as in this proceeding, substitute for licensed OFS facilities, however, must be licensed. ARRL does not by these distinctions presume to dictate to the Commission where, precisely, to draw the Section 301 line, and does not question that the Commission has, in general, made reasonable efforts to do so. It is readily apparent to ARRL that in this case, however, the line was crossed.

12. FHH argues that Congress has often acknowledged unlicensed operation under Part 15, and that such constitutes "tacit acceptance" of the concept. Surely, Congress has been aware for some time that consumer RF devices are permitted by FCC on an unlicensed basis. That alone, however, does not justify the assumption of unlimited jurisdiction to permit Part 15 devices on an unlicensed basis, regardless of power level, field strength, or interference potential. FHH cites the enactment of Section 302(a)(1) as an acknowledgement of unlicensed devices. However, as discussed in ARRL's Petition, the entire purpose of Section 302(a) was to shift from field enforcement of FCC regulation of such devices on an aftermarket basis at the user level to the manufacturer level. It was not, and nothing cited by FHH would indicate to the contrary, enacted to legitimize unlicensed RF devices. Nor is Congress, *sub silencio*, bound to have tacitly approved an exemption from Section 301, which is clear on its face.

13. Finally, FHH argues the public interest benefits of Part 15 devices, which is not contested herein. Nor is the argument relevant to the ARRL Petition for Reconsideration. Presumably, if certain RF devices are found to be in the public interest

and if licensing is not practical in those cases, the Commission will obtain necessary Congressional jurisdiction to authorize them on some other basis, perhaps by means of guard band managers, blanket licenses, or otherwise.

III. The Opposition of HWG

14. The HWG parties' arguments are similar to those of FHH, though HWG's misinterpretation of ARRL's argument is far more acute: HWG states that ARRL's argument, if successful, would "cause a major disruption to the United States economy and to the day-to-day lives of most Americans. It would also cause a bureaucratic nightmare of unimaginable proportions." *HWG Opposition, at 1.* After that grandiose argument, HWG notes (as had ARRL) that the Commission first allowed use of the spectrum without an individual license in 1938, and that this venerable institution is about to be rocked to its foundations by the ARRL's argument. As discussed heretofore, HWG can calm down. No such effect is called for by ARRL's Petition. However, it is beneficial to look at this venerable institution of unlicensed RF devices. The progression of unlicensed devices has come a long way since 1938. At that time, the Commission allowed unlicensed devices to operate at up to 15 microvolts per meter measured at a distance of Lambda (wavelength of the operating frequency) divided by 2 Pi. That level, as discussed at page 7 of the ARRL's Petition, was determined to be permissible for unlicensed devices *as long as their operation caused no harmful interference to licensed services* and the device did not generate emissions or field strength levels greater than a specified level. In 1989, when the Commission last revised its Part 15 rules on a plenary basis, it was clear that over the years, increased field strengths were permitted at higher frequencies *where it could be determined that the mass-marketing of such products would*

not result in harmful interference to authorized services. See, *Revision of Part 15 of the Rules Regarding the Operation of Radio Frequency Devices Without an Individual License*, 2 FCC Rcd. 6135 (1987). ARRL does not ask the Commission to revisit the issue of Part 15 devices going back to 1938, or to accept the obligation to license previously approved unlicensed devices. Looking at this proceeding, however, and in future proceedings, the Commission's obligation is to determine in advance whether the devices, or class of devices, operated in the aggregate or individually, have a significant interference potential to licensed radio services. If so, the devices cannot be authorized on an unlicensed basis.

15. Proceeding past the alarmist component of HWG's argument, the group first argues that Section 301 gives the Commission discretion to grant licenses individually or by rule to an entire class of users. That is a startling argument, because if it were so, Section 307(e) would be surplusage in its entirety, which cannot be the case. HWG states that Section 15.1(a) of the Commission's rules assumes operation without an *individual* license. That, of course, is merely the Commission's recitation of its authority, and in the last analysis, FCC jurisdiction is not self-defining. If the Commission assumes that it can either license devices or permit them by "general rule" as HWG argues, then where is the statutory authority for the "general rule" license substitute? It does not exist for Part 15 devices. It does, however, exist for several specific classes of RF devices, as discussed above. The specificity of the exemptions in Section 307(e) clearly precludes the "license by rule" argument of HWG.

16. HWG suggests that ARRL vacillates between arguing that "there is no exception" from the licensing requirements, and "only devices which have no significant

interference potential to licensed services are exempt". ARRL believes its Petition was quite clear. However, to remove all doubt, the posture of ARRL is that Section 301, on its face, contains no exceptions. That is exactly the problem facing the Commission. Therefore, because the principal purpose of the statute is to prevent interference, the Commission could only authorize unlicensed devices in the face of this statute if it could find that the devices have no significant interference potential to licensed services. This is not ARRL's own invention, and ARRL is certainly not attempting to rewrite the statute. Rewriting the statute is exactly what ARRL is arguing that the Commission itself cannot do, but in this proceeding in particular, it has done. Perhaps HWG could phrase the test differently, but the point is that the line should be drawn at "significant interference potential" since interference prevention is a principal purpose of Section 301. It is not possible to infer Commission jurisdiction to "license by rule" whatever the Commission wishes to license by rule, without offending the specific requirements of Section 301. There is nothing "incompatible" or "contradictory" in ARRL's argument, as HWG claims. What is incompatible and contradictory is HWG's argument that the license requirement of Section 301 can be read to permit "licensing by rule". It cannot, in light of the Section 307(e) provisions which authorize licensing by rule only in certain circumstances.

17. HWG makes the same Section 302(a) argument made by FHH, addressed above. HWG, however, also asserts that ARRL has "often agreed" that Part 15 is a reasonable way in which to regulate devices that emit RF energy. Quite right. Part 15, to the extent that the rules are adopted so as to preclude marketing of unlicensed devices which have significant interference potential to licensed services, is a reasonable means

of regulation of a class of unlicensed devices. If the permitted field strengths are appropriate for the band, emission mask, and other operating parameters, relative to the licensed services in the same or adjacent bands, the Part 15 rules work well. But the Commission has, recently, pushed the envelope and, in this case in particular, exceeded it. ARRL has made this argument in other, recent proceedings, but this is perhaps the most egregious to date, due to the demonstrated interference potential to licensed radio services, and because in this proceeding, the Commission has substituted unlicensed devices for Part 101, licensed, and coordinated point-to-point microwave facilities.

18. The version of the "Congressional acquiescence" argument made by HWG states that where Congress has not objected to certain Part 15 and Part 18 devices, that should be deemed to be its acquiescence. What this argument boils down to, however, is that Congress is aware of some Part 15 unlicensed operation, so therefore it must have consented *sub silencio* to all Part 15 operation, no matter what the emission levels or interference potential. That is an absurd argument. Congress cannot have maintained an absolute licensing requirement, and then made only limited, specific exemptions for certain devices to be licensed by rule, and at the same time be presumed to have authorized the Commission to allow by rule any RF device at any power level or operating parameter it wishes, without a license. That argument is simply untenable.

19. Finally, HWG makes a wholly inapposite argument that Section 301 is akin to Section 214 of the Communications Act of 1934, in which a certificate of public convenience and necessity was streamlined for some carriers over the years. There is no indication that the Section 214 certificate is akin to the licensing requirement of Section 301, and HWG cites none. HWG suggests that Section 214 does not include detailed

procedural requirements for certificates. However, Section 307 of the Act does impose detailed procedural requirements for license issuance, and that distinction alone is sufficient to render the Section 214/Section 301 comparison useless to HWG.

IV. The Opposition of IEEE 802.

20. The argument of IEEE 802, having been written in part by an employee of Agere Systems, Inc., one of the HWG parties, is not surprisingly similar to the HWG Opposition. IEEE 802's mischaracterization of the ARRL Petition suggests that ARRL objects to the marketing or use of unlicensed RF devices which "might possibly" cause interference. Where the "might possibly" language originates is a mystery; it most certainly did not come from ARRL's Petition, or any previous ARRL filing in this docket proceeding to date. IEEE 802 parrots the HWG argument that the Part 15 rules are consistent with Section 301 of the Communications Act, which, it argues, does not provide any detailed procedures for license issuance. That is correct, but Section 307 of the Act *does* provide such guidance, and Section 307(e) does not permit licensing by rule of Part 15 devices generally. It is carefully circumscribed in the jurisdiction it affords the Commission. Section 301 facially offers no flexibility. Unless ARRL's "substantial interference potential" test (which *does* offer the Commission extensive flexibility on a case-by-case basis and is reasonable in light of the intent of the statute) is adopted, IEEE and the other parties have essentially painted themselves into a corner. If the best argument they have is that Section 301 is flexible in terms of license requirements, they must by necessity divorce that section from Section 307, which cannot logically be done, when the two are read in context. They are then left with the absolute obligation of

Section 301, and their doomsday scenario of licensing obligations for garage door openers becomes an issue.

21. IEEE 802 next argues that the Part 15 rules adequately protect licensed services such as the Amateur Service. That argument is irrelevant to the issue now before the Commission, which is one of statutory interpretation. However, whether or not as a general factual matter, the Commission has shown itself to be a good steward of the spectrum resource relative to unlicensed device regulation, ARRL's premise here is that in this proceeding, the Part 15 rules adopted definitely do not adequately protect Amateur Stations, and that the Commission has far exceeded even the most flexible interpretation of its authority to permit unlicensed devices to be marketed, sold and used.

22. IEEE 802 suggests that the interference potential of 24GHz devices operated at 2500 mV/m using directional antennas as permitted in this proceeding is low, and that the Commission arrived at the proper balance in this case. ARRL is content to rely on the interference studies it submitted in the proceeding, and suggests that the Commission gave inadequate consideration to the arguments contained therein. There are many Amateur stations regularly operating at 24 GHz, and that number is increasing all the time. The interference potential to an Amateur station from an unlicensed device, where the Amateur receiver is in the main lobe of the directional antenna, is substantial indeed, and the field strength levels permitted in this proceeding are far higher than what can be deemed reasonable for an unlicensed device.

23. Finally, IEEE 802 argues, as did HWG, that ARRL's argument concerning statutory authority of the Commission is "untimely" because it was not raised before now, despite regular participation in Part 15 docket proceedings over the years, dating

back to prior to 1980. IEEE 802 cites no authority for its contention that participating in prior docket proceedings and failing to make a particular argument in those (which is actually not true of ARRL) bars making any such argument in this proceeding. That is not surprising, because no such authority exists. It would be a "star chamber" posture for the Commission to take, and would certainly be a novel approach to the Adminstrative Procedure Act, not duplicated in any other administrative agency procedures.

V. Opposition of Information Technology Industry Council

24. ITI's "comments" in this proceeding (actually an opposition) are perhaps the most cogent of any submitted in response to the ARRL Petition. ITI suggests that, given the allocation status of the 24.05-24.25 GHz band, and the highly directional nature of the point-to-point systems authorized in this proceeding under Section 15.249, ARRL should not be concerned about interference to the Amateur-Satellite Service at 24.00-24.05 GHz. While ARRL appreciates the Commission's sensitivity to the avoidance of Part 15 interference to Amateur-Satellite operations at 24.00-24.05 GHz, the exemption of that segment from the band made available for high-power Part 15 devices is not sufficient. The band 24.05-24.25 GHz is heavily used by terrestrial weak-signal Amateur stations which use similar or identical receivers to those used in the Amateur-Satellite service in the band. The interference potential is far greater than ITI presumes, and ARRL established such in its comments in this proceeding.

25. While ITI recites its view that the Commission has sufficient statutory authority to proceed with the Report and Order in this proceeding, and requests that the ARRL Petition be dismissed, it is not clear that there is any substantive disagreement about the test to be used. ITI states that the Commission is fully within its jurisdiction to

help advance the creation and advancement of new and innovative unlicensed low power products and services through authorizing the operation of unlicensed devices which have been determined to be "unlikely to cause interference to the licensed radio services." ITI cites the ARRL Petition for this test, and commends the Commission for authorizing unlicensed services to use low power levels on a non-interfering basis. If this represents ITI's position, ARRL does not disagree. Devices that don't meet the test enunciated by ITI, however, must be licensed, and the Commission has to determine where to draw the line. In this case, the line was improperly drawn, and the Commission must acknowledge that in each case in which it amends Part 15 to permit certain types of devices, it must draw that line so as to protect licensed services. Above the line, the devices must be licensed according to Section 301 of the Communications Act of 1934.

VI. Conclusions

The opposing parties mischaracterize ARRL's position, and in so doing, sound an alarm that is completely unnecessary. ARRL does not intend that the plethora of Part 15 devices now on the market must be licensed, or that all new devices need be licensed. Its position was adequately stated in the Petition. Devices which have a substantial interference potential to licensed radio services, such as point to point microwave devices operating at 2500 mV/m at 24 GHz, must be licensed. The Commission must decide in each case in which the Part 15 regulations are amended whether the device can meet that test, individually, and in the aggregate. However, devices above the "substantial interference" line must, according to the statutory scheme set forth by Congress, be operated only pursuant to a license issued by the Commission. That constitutes a limitation on the Commission's jurisdiction, and it must acknowledge such.

Therefore, the foregoing considered, ARRL respectfully requests that the Commission grant the Petition for Reconsideration filed in this proceeding, and reconsider and reverse the rules adopted in view of the limitation on the Commission's jurisdiction discussed herein and in the Petition. Specifically, it is requested that no changes in the Part 15 rules governing the 24.05-24.25 GHz band be implemented.

Respectfully submitted,

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June 28, 2002

CERTIFICATE OF SERVICE

I, Christopher D. Imlay, do hereby certify that I caused to be mailed, via first class U.S. Mail, postage prepaid, a copy of the foregoing CONSOLIDATED REPLY TO OPPOSITIONS TO PETITION FOR RECONSIDERATION, to the following, this 28th day of June, 2002.

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